



Description

- Seagrasses are highly productive habitats that occur on intertidal flats and in shallow coastal waters worldwide from arctic to tropical climates.
- Water temperature, light penetration, sediment type, salinity, and wave or current energy control seagrass distribution.
- Seagrasses provide a food source for green turtles, manatees, and waterfowl, who graze on seagrasses.
- Seagrasses are used by fish and shellfish as nursery areas.

Predicted Oil Behavior

- Oil will usually pass over subtidal seagrass beds, with no direct contamination.
- Oil that is heavier than seawater can become trapped in the beds, coating the leaves and sediments.
- Oil readily adheres to the vegetation, and the oiled blades are quickly defoliated when intertidal beds are oiled.
- Floating oil stranded on adjacent beaches can pick up sediment and then get eroded and deposited in adjacent beds.

Response Considerations

- Be careful when deploying and anchoring booms to prevent physical damage to seagrass beds.
- Be careful to prevent sediment suspension and mixing with the oil, and disturbance of roots and vegetation by foot traffic and boat activity.
- Do not cut seagrass unless species like sea turtles, manatees, or waterfowl are at significant risk of contacting or ingesting oil.
- Dispersant use directly over subtidal seagrass beds may impact the highly sensitive communities. However, use in offshore areas can reduce impacts to highly sensitive intertidal environments.
- In situ burning can be considered outside the immediate vicinity of seagrass beds to protect sensitive intertidal environments. Burn residues can sink; the potential effects of residues will depend on the composition and amount of the oil to be burned.

Response Method	Oil Category				
	I	II	III	IV	V
Oil Category Descriptions					
I – Gasoline products					
II – Diesel-like products and light crudes					
III – Medium grade crudes and intermediate products					
IV – Heavy crudes and residual products					
V – Non-floating oil products					
The following categories are used to compare the relative environmental impact of each response method in the specific environment and habitat for each oil type. The codes in each table mean:					
A = The least adverse habitat impact.					
B = Some adverse habitat impact.					
C = Significant adverse habitat impact.					
D = The most adverse habitat impact.					
I = Insufficient information - impact or effectiveness of the method could not be evaluated.					
— = Not applicable.					
Natural Recovery	A	A	A	B	B
Booming	B	B	B	B	—
Skimming	—	B	B	B	—
Physical Herding	—	B	B	B	—
Manual Oil Removal/Cleaning	—	—	B	B	B
Mechanical Oil Removal	—	—	D	D	D
Sorbents	—	A	A	A	B
Vacuum	—	—	B	B	B
Debris Removal	—	—	B	B	B
Vegetation Cutting/Removal	—	—	C	C	C
Low-pressure, Ambient Water Flushing	—	—	—	—	—
Dispersants	—	C	C	C	—
In-situ Burning	—	B	B	B	—

Consult the *Environmental Considerations for Marine Oil Spill Response* document referenced on page 5 before using this table.